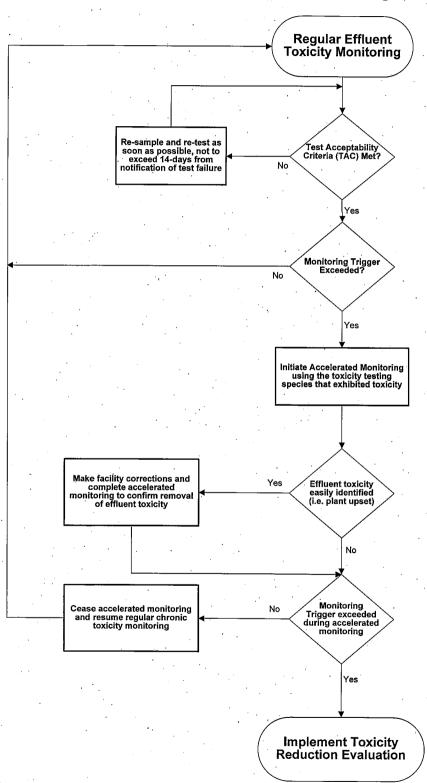
- Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting acute and Chronic Toxicity, Second Edition, EPA/600/R-92/080, September 1993.
- Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity, Second Edition, EPA/600/R-92/081, September 1993.
- Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA/821/R-02/012, October 2002.
- Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, EPA/821/R-02/013, October 2002.
- Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90/001, March 1991.

Figure F-1
WET Accelerated Monitoring Flow Chart



- b. **Effluent and Receiving Water Characterization Study.** An effluent and receiving water monitoring study is required to ensure adequate information is available for the next permit renewal.
- c. Time Schedule for Compliance with Groundwater Limitations and Best Practicable Treatment or Control (BPTC). The previous permit required the Discharger to install a groundwater monitoring network, including the characterization of background groundwater quality. To comply, the Discharger installed 18 monitoring wells, which includes the background groundwater quality monitoring well, MW-15. Quarterly monitoring results from 30 December 2003, through 5 February 2008, indicated that the Facility's storage, treatment, or disposal components may have degraded the underlying groundwater quality. Therefore this provision is necessary to prevent further degradation of the underlying groundwater within the influences of the Facility, and to ensure that the Beneficial Uses of the groundwater are protected. For additional information see previous Section V.B of this Fact Sheet.

## 3. Best Management Practices and Pollution Prevention

- a. **Pollution Prevention Plan (PPP) for Mercury.** The Discharger shall update and implement its PPP for mercury (*Pollution Prevention Plan Implementation for Total Dissolved Solids* [salinity], *Mercury and Group A Pesticides*, February 2005), in accordance with CWC section 13263.3(d)(1)(D). The interim effluent limitation for mercury limits the mass loading to current levels. The PPP for mercury is necessary to ensure that the discharge of this pollutant does not increase pending the development of TMDLs.
- b. **CWC section 13263.3(d)(3) Pollution Prevention Plans.** The pollution prevention plans required for mercury and salinity [measured as electrical conductivity] shall, at a minimum, meet the requirements outlined in CWC section 13263.3(d)(3). The minimum requirements for the pollution prevention plans include the following:
  - i. An estimate of all of the sources of a pollutant contributing, or potentially contributing, to the loadings of a pollutant in the treatment plant influent.
  - ii. An analysis of the methods that could be used to prevent the discharge of the pollutants into the Facility, including application of local limits to industrial or commercial dischargers regarding pollution prevention techniques, public education and outreach, or other innovative and alternative approaches to reduce discharges of the pollutant to the Facility. The analysis also shall identify sources, or potential sources, not within the ability or authority of the Discharger to control, such as pollutants in the potable water supply, airborne pollutants, pharmaceuticals, or pesticides, and estimate the magnitude of those sources, to the extent feasible.

- iii. An estimate of load reductions that may be attained through the methods identified in subparagraph ii.
- iv. A plan for monitoring the results of the pollution prevention program.
- v. A description of the tasks, cost, and time required to investigate and implement various elements in the pollution prevention plan.
- vi. A statement of the Discharger's pollution prevention goals and strategies, including priorities for short-term and long-term action, and a description of the Discharger's intended pollution prevention activities for the immediate future.
- vii. A description of the Discharger's existing pollution prevention programs.
- viii. An analysis, to the extent feasible, of any adverse environmental impacts, including cross-media impacts or substitute chemicals that may result from the implementation of the pollution prevention program.
- ix. An analysis, to the extent feasible, of the costs and benefits that may be incurred to implement the pollution prevention program.
- c. **Salinity Reduction Goal.** In an effort to monitor progress in reducing salinity discharges to the San Joaquin River, the Discharger shall provide annual reports demonstrating reasonable progress in the reduction of salinity in its discharge to the San Joaquin River. An annual average salinity goal of the maximum weighted average electrical conductivity of the City of Stockton's water supply (i.e. 273 µmhos/cm in March 2005), plus an increment of 500 µmhos/cm for typical consumptive use, has been established as a reasonable goal during the term of this permit. The annual reports shall be submitted in accordance with the Monitoring and Reporting Program (Attachment E, Section X.D.1.)
- d. Salinity Plan. The Regional Water Board, with cooperation of the State Water Board, has begun the process to develop a new policy for the regulation of salinity in the Central Valley. As previously described in this Fact Sheet, effluent data for EC and TDS indicate that effluent concentrations continue to be at levels of concern that may affect beneficial uses of the San Joaquin River. Therefore, this Order requires the Discharger to develop a Salinity Plan to reduce its salinity impacts to the San Joaquin River, which at a minimum must include source control measures, contributing financially in the development of the Central Valley Salinity Management Plan, and as reasonably possible, changing to water supplies with lower salinity. In addition, the Discharger is required to update and implement its pollution prevention plan for salinity in accordance with CWC section 13263.3(d)(3), and to implement pollution prevention measures to reduce the salinity in its discharge to the San Joaquin River.

The Antidegradation Policy (Resolution No. 68-16) requires that the Discharger implement best practicable treatment or control (BPTC) of its discharge. For salinity, the Regional Water Board is limiting effluent salinity of municipal

wastewater treatment plants to an increment of 500 µmhos/cm over the salinity of the municipal water supply or at existing levels. Based on the available data submitted by the Discharger, the highest concentration of EC reported was 273 µmhos/cm, based on 14 samples taken between September 2002 and June 2006. See previous section, "Salinity Production Goal", for additional information.

## 4. Construction, Operation, and Maintenance Specifications

a. **Treatment Pond Operating Requirements.** Requirements for the operation and maintenance of the treatment ponds are established to prevent flooding, reduce nuisances, and reduce public health concerns.

## 5. Special Provisions for Municipal Facilities (POTWs Only)

## a. Pretreatment Requirements.

- i. CWA Section 307(b), and CFR Part 403, require publicly owned treatment works to develop an acceptable industrial pretreatment program. A pretreatment program is required to prevent the introduction of pollutants and prevent pass through of pollutants that exceed water quality objectives, standards or permit limitations. Pretreatment requirements are imposed pursuant to CFR Part 403.
- ii. The Discharger shall implement and enforce its approved pretreatment program and is an enforceable condition of this Order. If the Discharger fails to perform the pretreatment functions, the Regional Water Board, the State Water Board or the USEPA may take enforcement actions against the Discharger as authorized by the CWA.
- b. **Biosolids (Special Provisions VI.C.5.b-d).** The use, disposal, or storage of biosolids is regulated under federal and state laws and regulations, including permitting requirements and technical standards included in 40 CFR Part 503. The Discharger is required to comply with the standards and time schedules contained in 40 CFR Part 503.
  - Title 27, CCR, Division 2, Subdivision 1, section 20005 establishes approved methods for the disposal of collected screenings, residual sludge, biosolids, and other solids removed from liquid wastes. This Order includes requirements to ensure the Discharger disposes of solids in compliance with State and federal regulations.
- c. Collection System. The Discharger's collection system is part of the treatment system that is subject to the Order 2006-0003, adopted by the State Water Board in May 2006; this Order is a Statewide General WDR for Sanitary Sewer Systems. Therefore, the Discharger shall be subject to the requirements of Order 2006-0003 and any future revisions thereto. Pursuant to federal regulations, the Discharger must properly operate and maintain its collection

system [CFR Part 122.41(e)], report any non-compliance [CFR parts 122.41(l)(6) and (7)], and mitigate any discharge from the collection system in violation of this Order [CFR Part 122.41(d)].

d. Turbidity Operational Requirements. Turbidity specifications have been included in this Order as a second indicator of the effectiveness of the treatment process and to assure compliance with the required level of treatment. Failure of the filtration system such that virus removal is impaired would normally result in increased particles in the effluent, which result in higher effluent turbidity. Turbidity has a major advantage for monitoring filter performance, allowing immediate detection of filter failure and rapid corrective action. These operational turbidity specifications are necessary to assess compliance with the DPH recommended Title 22 disinfection criteria. For further information see previous section IV.C.3.w. of this Fact Sheet.

## 6. Other Special Provisions

- a. **Tertiary Treatment.** To protect public health and safety, the Discharger is to comply with DHS reclamation criteria, CCR Title 22, Division 4, Chapter 3, or equivalent.
- b. To protect public health and safety, treatment and storage facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- c. **Ownership Change.** Sections 122.41(I)(3) and 122.61 of the CFR establish requirements for the transfer of an NPDES permit. Special Provision VI.C.6.c of this Order requires the Discharger to comply with federal regulations for the transfer of NPDES permits in the event of a change of ownership.

#### 7. Compliance Schedules - Not Applicable

#### VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, Central Valley Region (Regional Water Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the City of Stockton Regional Wastewater Control Facility. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

#### A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through publication in the Stockton Record.

#### **B. Written Comments**

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on 22 September 2008

## C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:

23/24 October 2008

Time:

8:30 am

Location:

Regional Water Quality Control Board, Central Valley Region

11020 Sun Center Dr., Suite #200 Rancho Cordova, CA 95670

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/rwqcb5/ where you can access the current agenda for changes in dates and locations.

## D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board Office of Chief Counsel

P.O. Box 100, 1001 I Street Sacramento, CA 95812-0100

## E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling 916-464-3291.

## F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

#### G. Additional Information

Requests for additional information or questions regarding this order should be directed to Ms. Gayleen Perreira at 916-464-4824.

ATTACHMENT G - REASONABLE POTENTIAL SUMMARY

		- 12			,		l	4.5.2E	I	1 12			· · ·		<u>.                                    </u>					1		24,	
Reasonable Potential	Yes	Yes	2	No	2	Yes	S	S.	No	No	Yes	No	S.	No	ON	Yes	Yes	8	No	ON	N <sub>O</sub>	Yes	No
MCL	200		9	10	1,000	<b>,</b>	80	2	18	210000	. 08	80	-20	50	. 1,000	150	80	1	2,000	300	15	50	2
Basin Plan	I		1	1	-	Г	1	1	1		1	1	ı		-			ŧ	1	1	I	1	1
Org. Only	I	7	4,300			5.9	360		. 1		34		ı		-	220,000	46	120,000	1		٠ -	•	0.051
Water & Org	1		14		1	1.8	4.3			1	0.41				1,300	200	0.56	23,000			1	101 101	0.05
222	87²	3704,5	1	150	ı	1	:	2.42	1	230,000 <sup>2</sup>	1	_	_	11.43	9.17	5.2		ı		7	3.10	1	0.772
CMC	7501	2,140 <sup>1,3</sup>	1	340	ŀ			4.03	1	860,0001	ı		-	16.29	13.74	22		ı	•		61.42		1.401
ර	87	370	9	10	. 1,000	1.8	4.3	2.27	18	106,000	0.41	80	20	11.43	8.53	5.2	95'0	23,000	2,000	300	2.78	50	0.05
: <b>(</b>	1,800	1,400	9.0	1.4.	72	3.2	<0.03	<0.1	<5	140,000	<0.03	6:0	3.8	0.41	5	300	20.0	<2>	400	100	1.1	240	0.0088
MEC	1,900	31,000	0.7	4.4	26	9.9	0.8	0.04	2.3	210,000	29	. 21	1.2	1.2	9	13	28	9	600	<12	0.81	170	0.011
Units	hg/L	hg/L	J/Brl	∏/βfl	µg/L	T/6rl	hg/L	−J/Brl	hg/L	hg/L	hg/L	_1/6rl	µg/L	J/6rl	hg/L	µg/L	ng/L	hg/L	µg/L	·µg/L	hg/L	hg/L	hg/L
Constituent	Aluminum	Ammonia	Antimony	Arsenic	Barium	Bis(2- Ethylhexyl)Phthalate	Bromoform	Cadmium	Carbofuran	Chloride	Chlorodibromomethane	Chloroform	Chromium (total)	Chromium (VI)	Copper	Cyanide	Dichlorobromomethane	Diethyl Phthalate	Fluoride	Iron, dissolved	Lead	Manganese	Mercury

Reasonable Potential	No	No	No	°N	Yes	No	Yes	Yes	No	Ŷ	°N	S.	No	No	No	No	No ·
MCL	3,	. 5	200	5	10 <sup>6</sup>	100	10,000	1,000	0.14 <sup>12</sup>	20°	100	250,000	5	2	150	5	5,000
Basin Plan	= 4	1,		1	1	ł	_	1	1	-	1	1		ı	1		1
Org. Only		ı		1,600		4,600	1	1	-	1		ı	8.85	6.3	200,000	81	-
Water & Org		1		4.7		610	-	1					0.8	1.7	6,800	2.7	1
- :000		51,000²	-	1		51.28		-	1	5	1	1	-	40	•		109.58
CMC		151,0001		1		461.22				20	3.90	1		1,400			117.78
9	8	5	500	4.7	10	47.7	10,000	1,000	0.14	. 2	3.39	250,000	0.8	1.7	150	2.7	117.78
<b>B</b>	5.0>	3.4	NA	0.12	NA	6.4	4,200	100	300	. 2	0.03	130,000	<0.04	0.1	<0.5	0.2	6
MEC	2.0	2	200	0.48	13	9	29,000	2,300	3,900	. 2	0.4	180,000	0.09	6.0	3.6	20.0>	20
Units	hg/L	hg/L	µg/L	µg/L	pg/L	hg/L	− hg/L	hg/L	hg/L	hg/L	hg/L	hg/Ľ	µg/L	hg/L	hg/L	J/6rl	µg/L
Constituent	Methyl Chloride	Methyl tert-butyl ether	Methylene Blue Activated Substances	Methylene Chloride	Molybdenum	Nickel	Nitrate	Nitrite	Phosphorus	Selenium	Silver	Sulfate	Tetrachloroethylene	Thallium	Toluene	Trichloroethylene	Zinc

General Notes: All inorganic concentrations are given as a total recoverable.

Although a RPA of all priority pollutants, and other constituents, were conducted, the Reasonable Potential Summary only displays the RPA results for those constituents where concentrations were detected either in the effluent (MEC) or in the background (B).

B = Maximum Receiving Water Concentration or lowest detection level, if non-detect MEC = Maximum Effluent Concentration

CMC = Criterion Maximum Concentration (CTR criterion unless otherwise noted) CCC = Criterion Continuous Concentration (CTR criterion unless otherwise noted) C = Criterion used for Reasonable Potential Analysis

Water & Org≕ Water and Organism Criterion Concentration (CTR or NTR) Basin Plan = Numeric Site-specific Basin Plan Water Quality Objective - Drinking Water Standards Maximum Contaminant Level

Reported as non-detect Not available

Footnotes:

(1) USEPA National Recommended Ambient Water Quality Standard,

1-hour average (2) USEPA National Recommended Ambient Water Quality Standard, 4-day average

(3) Salmonids present and maximum permitted effluent pH of 8.5 (4) USEPA National Recommended Ambient Water Quality Standard, 30-day average

(5) Early Life Stages (ELS) present and maximum allowable effluent pH Agriculture, Food and Agriculture Organization of the United Nations of 8.5 and maximum allowable 30-day rolling averageR-1 temperature of 8.02°C(6) Ayers, R.S. and D.W. Westcot, Water Quality for rrigation and Drainage Paper No. 29, Rev. 1, Rome (1985)

(7) USEPA Drinking Water Health Advisory or Suggested No-Adverse-

Org. Only Basin MCL Reasonable Potential	evels (SNARLs) for toxicity other than cancer risk
Water & Org	Response Levels (SI
222	
CMC	
<b>9</b>	
<b>B</b>	
MEG	
Units	
17	
Constituent	
1	

Response Levels (SNARLs) for toxicity other than cancer risk
(8) USEPA IRIS Reference Dose for white phosphorous. The Regional Board staff are still considering the applicability and relationship of this criterion to total phosphorus.

			Controlling Water Qual Surface Wa		•	
CTR #	Constituent	CAS Number	Basis	Criterion Concentration (ug/L or noted) (1)	Criterion Quantitation Limit (ug/L or noted)	Suggested Tes Methods
/OL/	ATILE ORGANICS				<del></del>	
28	1,1-Dichloroethane	75343	Primary MCL	5	`0.5	EPA 8260B
30	1,1-Dichloroethene	75354	National Toxics Rule	0.057	0.5	EPA 8260B
41	1,1,1-Trichloroethane	71556	Primary MCL	200	0.5	EPA 8260B
42	1,1,2-Trichloroethane	79005	National Toxics Rule	0.6	0.5	EPA 8260B
.37	1,1,2,2-Tetrachloroethane	79345	National Toxics Rule	0.17	0.5	EPA 8260B
75	1,2-Dichlorobenzene	95501	Taste & Odor	10	0.5	EPA 8260B
29	1,2-Dichloroethane	107062	National Toxics Rule	0.38	0.5	EPA 8260B
	cis-1,2-Dichloroethene	156592	Primary MCL	6	0.5	EPA 8260B
31	1,2-Dichloropropane	78875	Calif. Toxics Rule	0.52	0.5	EPA 8260B
	1,2,4-Trichlorobenzene	120821	Public Health Goal	5	0.5	EPA 8260B
76	1,3-Dichlorobenzene	541731	Taste & Odor	10	0.5	EPA 8260B
32	1,3-Dichloropropene	542756	Primary MCL	0.5	0.5	EPA 8260B
77	1,4-Dichlorobenzene	106467	Primary MCL	5	0.5	EPA 8260B
17	Acrolein	107028	Aguatic Toxicity	21	2	EPA 8260B
18	Acrylonitrile	107131	National Toxics Rule	0.059	2	EPA 8260B
19	Benzene	71432	Primary MCL	1	0.5	EPA 8260B
20	Bromoform	75252	Calif. Toxics Rule	4.3	0.5	EPA 8260B
34	Bromomethane	74839	Calif. Toxics Rule	48	- <del>0.0</del>	
21	Carbon tetrachloride	56235~	National Toxics Rule	0.25	0.5	EPA 8260B
22	Chlorobenzene (mono chlorobenzene)	108907	Taste & Odor	50	0.5	EPA 8260B
24	Chloroethane	75003.	Taste & Odor	16	0.5	EPA 8260B EPA 8260B
25	2- Chloroethyl vinyl ether	110758	Aquatic Toxicity	122 (3)	1	<del> </del>
26	Chloroform	67663	OEHHA Cancer Risk			EPA 8260B
35	Chloromethane	74873	USEPA Health Advisory	3	0.5	EPA 8260B
23	Dibromochloromethane	124481	Calif. Toxics Rule	0.41	0.5	EPA 8260B
27	Dichlorobromomethane	75274	Calif. Toxics Rule		0.5	EPA 8260B
36	Dichloromethane	<del> </del>		0.56	0.5	EPA 8260B
	Ethylbenzene	75092 100414	Calif. Toxics Rule	4.7	0.5	EPA 8260B
88	Hexachlorobenzene		Taste & Odor	29	0.5	EPA 8260B
89	Hexachlorobutadiene	118741	Calif. Toxics Rule	0.00075	1 .	EPA 8260B
	Hexachloroethane	87683	National Toxics Rule	0.44	1	EPA 8260B /
_	Naphthalene	67721	National Toxics Rule	1.9	10	EPA 8260B
38	Tetrachloroethene	91203	USEPA IRIS	14 .	10	EPA 8260B
39	Toluene	127184	National Toxics Rule	0.8	0.5	EPA 8260B
	trans-1,2-Dichloroethylene	108883	Taste & Odor	42	0.5	EPA 8260B
43	Trichloroethene	156605	Primary MCL	10	0.5	EPA 8260B
	Vinyl chloride	79016	National Toxics Rule	2.7	0.5	EPA 8260B
	<del></del>	75014	Primary MCL	0.5	0.5	EPA 8260B
	Methyl-tert-butyl ether (MTBE)	1634044	Secondary MCL	. 5	0.5	EPA 8260B
	Trichlorofluoromethane	75694	Primary MCL	150	5	EPA 8260B
	1 1 2 Triphlers 1 2 2 Triphlers 11 2 7	70404	D. J			
	1,1,2-Trichloro-1,2,2-Trifluoroethane Styrene	76131 100425	Primary MCL Taste & Odor	1200 11	10 0.5	EPA 8260B EPA 8260B

SEM	I-VOLATILE ORGANICS			<u> </u>	·	· ·
60	1,2-Benzanthracene	56553	Calif. Toxics Rule	0.0044	5	EPA 8270C
85	1,2-Diphenylhydrazine	122667	National Toxics Rule	0.04	<del>                                     </del>	EPA 8270C
45	2-Chlorophenol	95578	Taste and Odor	0.04	1	
46	2,4-Dichlorophenol	120832	Taste and Odor	0.1	2	EPA 8270C
47	2,4-Dimethylphenol	105679	Calif. Toxics Rule		1	EPA 8270C
49	2,4-Dinitrophenol	51285	National Toxics Rule	540	2	EPA 8270C
82	2,4-Dinitrotoluene	121142	National Toxics Rule	70	5	EPA 8270C
55	2,4,6-Trichlorophenol	88062		0.11	5	EPA 8270C
83	2.6-Dinitrotoluene	606202	Taste and Odor	2	10	EPA 8270C
50	2-Nitrophenol		USEPA IRIS	0.05	5 /	EPA 8270C
71	2-Chloronaphthalene	25154557	Aquatic Toxicity	150 (5)	. 10	EPA 8270C
78		91587	Aquatic Toxicity	1600 (6)	10	EPA 8270C
<del></del>	3,3'-Dichlorobenzidine	91941	National Toxics Rule	0.04	5	EPA 8270C
62	3,4-Benzofluoranthene	205992	Calif. Toxics Rule	0.0044	10	EPA 8270C
52	4-Chloro-3-methylphenol	59507	Aquatic Toxicity	30	5	EPA 8270C
48	4,6-Dinitro-2-methylphenol	534521	National Toxics Rule	13.4	10	EPA 8270C
51	4-Nitrophenol	100027	USEPA Health Advisory	60	5	EPA 8270C
69	4-Bromophenyl phenyl ether	101553	Aquatic Toxicity	122	10	EPA 8270C
72	4-Chlorophenyl phenyl ether	7005723	Aquatic Toxicity	122 (3)	5	EPA 8270C
56	Acenaphinene	83329	Taste and Odor	20	. 1	EPA 8270C
57	Acenaphthylene	208968	No Criteria Available		10	EPA 8270C
58	Anthracene	120127	Calif. Toxics Rule	9,600	10	EPA 8270C
59	Benzidine	92875	National Toxics Rule	0.00012	5	EPA 8270C
61	Benzo(a)pyrene (3,4-Benzopyrene)	50328	Calif. Toxics Rule	0.0044	0.1	EPA 8270C
63	Benzo(g,h,i)perylene	191242	No Criteria Available		5	EPA 8270C
64	Benzo(k)fluoranthene	207089	Calif. Toxics Rule	0.0044	2	EPA 8270C
65	Bis(2-chloroethoxy) methane	111911 ·	No Criteria Available		5	EPA 8270C
66	Bis(2-chloroethyl) ether	111444	National Toxics Rule	0.031	1	EPA 8270C
67	Bis(2-chloroisopropyl) ether	39638329	Aquatic Toxicity	122 (3)	10	EPA 8270C
68 -	Bis(2-ethylhexyl) phthalate	117817	National Toxics Rule	1.8	3	EPA 8270C
70	Butyl benzyl phthalate	85687	Aquatic Toxicity	3 (7)	10	EPA 8270C
73	Chrysene	218019	Calif. Toxics Rule	0.0044	5	EPA 8270C
81	Di-n-butylphthalate	84742	Aquatic Toxicity	3 (7)	10	EPA 8270C
84	Di-n-octylphthalate	117840	Aquatic Toxicity	3 (7)	10	EPA 8270C
74	Dibenzo(a,h)-anthracene	53703	Calif. Toxics Rule	0.0044	0.1	EPA 8270C
79.	Diethyl phthalate	84662	Aquatic Toxicity	3 (7)	2	EPA 8270C
80	Dimethyl phthalate	131113	Aquatic Toxicity	3 (7)	2	EPA 8270C
86	Fluoranthene	206440	Calif. Toxics Rule	300	10	EPA 8270C
87	Fluorene	86737	Calif. Toxics Rule	1300	10	EPA 8270C
90	Hexachlorocyclopentadiene	77474	Taste and Odor	.1	1	EPA 8270C
92	Indeno(1,2,3-c,d)pyrene	193395	Calif. Toxics Rule	0.0044	0.05	EPA 8270C
93	Isophorone	78591	National Toxics Rule	8.4	1	EPA 8270C
98	N-Nitrosodiphenylamine	86306	National Toxics Rule	5	. 1	EPA 8270C
96	N-Nitrosodimethylamine	62759	National Toxics Rule	0.00069	5	EPA 8270C
97	N-Nitrosodi-n-propylamine	621647	Calif. Toxics Rule .	0.005	5	EPA 8270C
95.	Nitrobenzene	98953	National Toxics Rule	17	10	EPA 8270C
53	Pentachlorophenol	87865	Calif. Toxics Rule	0.28	0.2	EPA 8270C
99	Phenanthrene	85018	No Criteria Available		5	EPA 8270C
54	Phenol	108952	Taste and Odor	5	.1	EPA 8270C
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INOF	RGANICS				i	
	Aluminum	7429905	Ambient Water Quality	. 87	50	EPA 6020/200.8
1	Antimony	7440360	Primary MCL	6	5	EPA 6020/200.8
2	Arsenic	7440382	Ambient Water Quality	0.018	0.01	EPA 1632
15	Asbestos	1332214	National Toxics Rule/ Primary MCL	7 MFL	0.2 MFL >10um	EPA/600/R- 93/116(PCM)
	Barium	7440393	Basin Plan Objective	100 .	100	EPA 6020/200.8
3	Beryllium	7440417	Primary MCL	4	1	EPA 6020/200.8
4	Cadmium	7440439	Public Health Goal	0.07	0.25	EPA 1638/200.8
5a	Chromium (total)	7440473	Primary MCL	50	- 2	EPA 6020/200.8
5b	Chromium (VI)	18540299	Public Health Goal	0.2	0.5	EPA 7199/ 1636
6	Copper	7440508	National Toxics Rule	4.1 (2)	0.5	EPA 6020/200.8
14	Cyanide	57125	National Toxics Rule	5.2	5	EPA 9012A
	Fluoride	7782414	Public Health Goal	1000	0.1	EPA 300
	Iron	7439896	Secondary MCL	300	100	EPA 6020/200.8
7	Lead	7439921	Calif. Toxics Rule	0.92 (2)	0.5	EPA 1638
8	Mercury	7439976	TMDL Development		0.0002 (11)	EPA 1669/1631
	Manganese	7439965	Secondary MCL/ Basin Plan Objective	50	20	EPA 6020/200.8
9	Nickel	7440020	Calif. Toxics Rule	24 (2)	5	EPA 6020/200.8
10.	Selenium	7782492	Calif. Toxics Rule	5 (8)	5	EPÁ 6020/200.8
11	Silver	7440224	Calif. Toxics Rule	0.71 (2)	1	EPA 6020/200.8
12	Thallium	7440280	National Toxics Rule	1.7	1	EPA 6020/200.8
	Tributyltin	688733	Ambient Water Quality	0.063	0.002	EV-024/025
13	Zinc	7440666	Calif. Toxics Rule/ Basin Plan Objective	54/ 16 (2)	10	EPA 6020/200.8
		*				
	TICIDES - PCBs					
	4,4'-DDD	72548	Calif. Toxics Rule	0.00083	0.02	EPA 8081A
	4,4'-DDE	72559	Calif. Toxics Rule	0.00059	0.01	EPA 8081A
	4,4'-DDT	50293	Calif. Toxics Rule	0.00059	0.01	EPA 8081A
	alpha-Endosulfan	959988	National Toxics Rule	0.056 (9)	0.02	EPA 8081A
103	alpha-Hexachlorocyclohexane (BHC)	319846	Calif. Toxics Rule	0.0039	0.01	EPA 8081A
•	Alachlor	15972608	Primary MCL	2	1 .	EPA 8081A
	Aldrin	309002	Calif. Toxics Rule	0.00013	0.005	EPA 8081A
	beta-Endosulfan	33213659	Calif. Toxics Rule	0.056 (9)	0.01	EPA 8081A
	beta-Hexachlorocyclohexane	319857	Calif. Toxics Rule	0.014	0.005	EPA 8081A
107	Chlordane	57749	Calif. Toxics Rule	0.00057	0.1	EPA 8081A
	delta-Hexachlorocyclohexane	319868	No Criteria Available	<u> </u>	0.005	EPA 8081A
	Dieldrin	60571	Calif. Toxics Rule	0.00014	0.01	EPA 8081A
	Endosulfan sulfate	1031078	Ambient Water Quality	0.056	0.05	EPA 8081A
	Endrin	72208	Calif. Toxics Rule	0.036	0.01	EPA 8081A
	Endrin Aldehyde	7421934	Calif. Toxics Rule	0.76	0.01	EPA 8081A
	Heptachlor	76448	Calif. Toxics Rule	0.00021	0.01	EPA 8081A
	Heptachlor Epoxide	1024573	Calif. Toxics Rule	0.0001	0.01	EPA 8081A
	Lindane (gamma-Hexachlorocyclohexane)	58899	Calif. Toxics Rule	0.019	0.019	EPA 8081A
	PCB-1016	12674112	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
120	PCB-1221	11104282	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082

			•			
121	PCB-1232	11141165	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
122	PCB-1242	53469219	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
123	PCB-1248	12672296	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
124	PCB-1254	11097691	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
125	PCB-1260	. 11096825	Calif. Toxics Rule	0.00017 (10)	0.5	EPA 8082
126	Toxaphene	8001352	Calif. Toxics Rule	0.0002	0.5	EPA 8081A
	Atrazine	1912249	Public Health Goal	0.15	. 1	EPA 8141A
	Bentazon	25057890	Primary MCL	18	2	EPA 643/ 515.2
•	Carbofuran	1563662	CDFG Hazard Assess.	0.5	5	EPA 8318
,	2,4-D	94757	Primary MCL	70	10	EPA 8151A
	Dalapon	75990	Ambient Water Quality	110	10	EPA 8151A
	1,2-Dibromo-3-chloropropane (DBCP)	96128	Public Health Goal	0.0017	0.01	EPA 8260B
•	Di(2-ethylhexyl)adipate	103231	USEPA IRIS	30 -	5	EPA 8270C
	Dinoseb	88857	Primary MCL	7	2	EPA 8151A
	Diquat	85007	Ambient Water Quality	0.5	4	EPA 8340/ 549.1/HPLC
- 1	Endothal	145733	Primary MCL	100 .	45	EPA 548.1
	Ethylene Dibromide	106934	OEHHA Cancer Risk	0.0097	0.02	EPA 8260B/ 504
	Glyphosate	1071836	Primary MCL	700	25	HPLC/ EPA 547
	Methoxychlor	72435	Public Health Goal	30	10	EPA 8081A
	Molinate (Ordram)	2212671	CDFG Hazard Assess.	13	2	EPA 634
	Oxamyl	23135220	Public Health Goal	50	20	EPA 8318/ 632
	Picloram	. 1918021	Primary MCL	500	1	EPA 8151A
	Simazine (Princep)	122349	USEPA IRIS	3.4	1	EPA 8141A
•	Thiobencarb	28249776	Basin Plan Objective/ Secondary MCL	1	1	HPLC/ EPA 639
16	2,3,7,8-TCDD (Dioxin)	1746016.	Calif. Toxics Rule	1.30E-08	5.00E-06	EPA 8290 (HRGC) MS
	2,4,5-TP (Silvex)	93765	Ambient Water Quality	10 . 1	1	EPA 8151A
	Diazinon	333415	CDFG Hazard Assess.	0.05	0.25	EPA 8141A/ GCMS
	Chlorpyrifos	2921882	CDFG Hazard Assess.	0.014	. 1	EPA 8141A/ GCMS

OTHER CONSTITUENTS				•	
Ammonia (as N)	7664417	Ambient Water Quality	1500 (4)		EPA 350.1
Chloride	16887006	Agricultural Use	106,000		EPA 300.0
Flow			1 CFS		
Hardness (as CaCO <sub>3</sub> )			5000		EPA 130.2
Foaming Agents (MBAS)	,	Secondary MCL	500		SM5540C
Nitrate (as N)	14797558	Primary MCL	10,000	2,000	EPA 300.0
Nitrite (as N)	14797650	Primary MCL	1000	400	EPA 300.0
pH	•	Basin Plan Objective	6.5-8.5	0.1	EPA 150.1
Phosphorus, Total (as P)	7723140	USEPA IRIS	0.14		EPA 365.3
Specific conductance (EC)		Agricultural Use	700 umhos/cm		EPA 120.1
Sulfate		Secondary MCL	250,000	500	EPA 300.0
Sulfide (as S)		Taste and Odor	0.029	***	EPA 376.2
Sulfite (as SO <sub>3</sub> )		No Criteria Available			SM4500-SO3
Temperature		Basin Plan Objective	°F		
Total Disolved Solids (TDS)		Agricultural Use	450,000		EPA 160.1

#### FOOTNOTES:

- (1) The Criterion Concentrations serve only as a point of reference for the selection of the appropriate analytical method. They do not indicate a regulatory decision that the cited concentration is either necessary or sufficient for full protection of beneficial uses. Available technology may require that effluent limits be set lower than these values.
- (2) Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. Values displayed correspond to a total hardness of 40 mg/L.
- (3) For haloethers
- (4) Freshwater aquatic life criteria for ammonia are expressed as a function of pH and temperature of the water body. Values displayed correspond to pH 8.0 and temperature of 22 C.
- (5) For nitrophenols.
- (6) For chlorinated naphthalenes.
- (7) For phthalate esters.
- (8) Basin Plan objective = 2 ug/L for Salt Slough and specific constructed channels in the Grassland watershed.
- (9) Criteria for sum of alpha- and beta- forms.
- (10) Criteria for sum of all PCBs.
- (11) Mercury monitoring shall utilize "ultra-clean" sampling and analytical methods. These methods include:

Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, US EPA; and

Method 1631: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluoresence, US EPA

## Dioxin and Furan Sampling

Section 3 of the State Implementation Plan requires that each NPDES discharger conduct sampling and analysis of dioxin and dibenzofuran congeners. Dioxin and Furan sampling shall be conducted in the effluent and receiving water once during dry weather and once during wet weather.

Each sample shall be analyzed for the seventeen congeners listed in the table below. High Resolution GCMS Method 8290, or another method capable of individually quantifying the congeners to an equivalent detection level, shall be used for the analyses.

For each sample the discharger shall report:

- The measured or estimated concentration of each of the seventeen congeners
- The quantifiable limit of the test (as determined by procedures in Section 2.4.3, No. 5 of the SIP)
- The Method Detection Level (MDL) for the test

The TCDD equivalent concentration for each analysis calculated by multiplying the concentration of each congener by the Toxicity Equivalency Factor (TEF) in the following table, and summing the resultant products to determine the equivalent toxicity of the sample expressed as 2,3,7,8-TCDD.

Congener	TEF
2,3,7,8TetraCDD	1
1,2,3,7,8-PentaCDD	1.0
1,2,3,4,7,8-HexaCDD	0.1
1,2,3,6,7,8-HexaCDD	0.1
1,2,3,7,8,9-HexaCDD	0.1
1,2,3,4,6,7,8-HeptaCDD	0.01
OctaCDD	0.0001
2,3,7,8-TetraCDF	0.1
1,2,3,7,8-PentaCDF	0.05
2,3,4,7,8-PentaCDF	0.5
1,2,3,4,7,8-HexaCDF	0.1
1,2,3,6,7,8-HexaCDF	0.1
1,2,3,7,8,9-HexaCDF	0.1
2,3,4,6,7,8-HexaCDF	0.1
1,2,3,4,6,7,8-HeptaCDF	0.01
1,2,3,4,7,8,9-HeptaCDF	0.01
OctaCDF	0.0001



A PROFESSIONAL CORPORATION

September 22, 2008

JOHN Y. "JACK" DIEPENBROCK KAREN L. DIEPENBROCK KEITH W. McBRIDE BRADLEY J, ELKIN EILEEN IL DIEPENBROCK MARK D. HARRISON GENE K. CHEEVER LAWRENCE B. GARCIA ANDREA A. KATARAZZO JOEL PATRICK ERB JOH D. RUBIN JENNIFER 1. DAUER JEFFREY K. DORSD

JEFFREY L ANDERSON SEAN K. HUNGERFORD LEONOR Y, DICDICAN JULIE Y. REISER CHRIS A. McCANDLESS DAVID P. TEMBLADOR DAN H. SILVERBOARD LAMONT T.: KING, JR. DANIEL J. WHITNEY DAVID A. DIEPENBROCK IONATHAN R. MARZ YALERIE C. KINCAID ANTHONY J. CORTEZ

R. JAMES DIEPENBROCK (1929 - 2002)

Ms. Pamela C. Creedon, Executive Officer Mr. Kenneth D. Landau, Assistant Executive Officer Regional Water Quality Control Board, Central Valley Region 11020 Sun Center Dr., Suite #200 Rancho Cordova, CA 95670

> Renewal of Waste Discharge Requirements (NPDES No. CA0079138) Re: and Time Schedule Order for City of Stockton Regional Wastewater Treatment Control Facility, San Joaquin County

Dear Ms. Creedon and Mr. Landau:

Through this letter, the San Luis & Delta-Mendota Water Authority ("Authority"). on behalf of its member agencies, and Westlands Water District ("Westlands") provide written comments on the tentative waste discharge requirements (National Pollutant Discharge Elimination System ("NPDES") permit No. CA0079138) applicable to the City of Stockton's ("City") Regional Wastewater Treatment Control Facility ("RWCF") ("Tentative Discharge Requirements").

The Authority, formed in 1992 as a joint powers authority, consists of 31 public agencies, each of which contracts with the United States Department of the Interior, Bureau of Reclamation ("Reclamation"), for water from the Central Valley Project ("CVP"). The Authority's members hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP water annually. Reclamation conveys CVP water delivered to the Authority's members through the Sacramento-San Joaquin River Delta ("Delta"). Of the amount of water under contract, the Authority's members put to beneficial use, on average, approximately 2 million acre-feet of water on about 1.2 million acres of agricultural lands within the western San Joaquin Valley and parts of San Benito and Santa Clara Counties, California; 200,000 acre-feet for municipal and industrial uses, including those within the Silicon Valley; and approximately 300,000

> 400 CAPITOL MALL SUITE 1800 SACRAMENTO, CA 95814

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acre-feet for environmental purposes, including for waterfowl and wildlife habitat management in the San Joaquin Valley, California.

Westlands, a member of the Authority, is a California water district formed in 1952. Westlands uses CVP water for irrigation of approximately 500,000 acres on the west side of the San Joaquin Valley in Fresno and Kings Counties, as well as for municipal and industrial purposes within those Counties. Westlands' farmers produce more than 60 high quality commercial food and fiber crops sold for the fresh, dry, canned, and frozen food markets, both domestic and export. More than 50,000 people live and work in the communities that are dependent on Westlands' agricultural economy.

The Authority and Westlands appreciate the challenge the California Regional Water Quality Control Boards ("Regional Boards") face in balancing the competing interests potentially affected by renewal of the City's NPDES permit. In an effort to help the Central Valley Regional Board make a properly balanced and reasoned decision, the Authority and Westlands submit the following comments.

## Interest In Tentative Discharge Requirements

The RWCF is part of the City's wastewater collection and treatment system. That system is comprised of over 38,000 sewer connections and 900 miles of sanitary lines. (City of Stockton, Municipal Utilities Department, http://www.stocktongov.com/MUD/General/waste\_water/waste\_main.cfm, available as of September 18, 2008.) The City's RWCF provides sewerage service to the City, the Port of Stockton, and surrounding urbanized areas of San Joaquin County. As currently permitted, the City's treated municipal wastewater should be discharged from a single outfall into the Delta.

The Authority and Westlands have an acute interest in discharges to the Delta because of the impact they can have on the water supply of the Authority's member agencies, including Westlands. Two examples highlight this point. First, the State Water Resources Control Board ("SWRCB") assigned to Reclamation significant responsibility for water quality objectives established in the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary ("Bay Delta Plan"), a copy of which is attached hereto as Exhibit A. As a result, discharges into the Delta that fail to adequately protect beneficial uses of Delta water could require Reclamation to increase releases from CVP reservoirs and/or reduce pumping at in-Delta CVP facilities.

Pamela C. Creedon, Executive Officer Kenneth D. Landau, Assistant Executive Officer Regional Water Quality Control Board, Central Valley Region September 22, 2008 Page 3

to avoid a claim that Reclamation is not meeting its responsibilities. Either of those actions would likely reduce the amount of water available to the Authority's member agencies, including Westlands. In addition, it is likely pollutants discharged from wastewater treatment facilities, including the RWCF, adversely affect fish species dependant upon the Delta. Such effects may increase the level of regulatory constraints imposed under the federal Endangered Species Act on Reclamation's CVP operations. The added regulatory constraints on the CVP also could limit the amount of CVP water made available to the Authority's member agencies, including Westlands.

## Background Of Law Applicable To The NPDES Permit For The City's RWCF

The federal Water Pollution Control Act of 1972 (the "Clean Water Act") is designed to restore and maintain the "chemical, physical, and biological integrity of the Nation's waters." (33 U.S.C. § 1251.) The Clean Water Act makes it unlawful to discharge pollutants from a point source into the waters of the United States. (33 U.S.C. § 1311(a).) Section 402 of the Clean Water Act, however, establishes the NPDES under which the United States Environmental Protection Agency or an authorized state may issue permits that grant a permittee the right to discharge. (33 U.S.C. § 1342.)

In California, the Porter-Cologne Water Quality Control Act ("Porter-Cologne Act") is designed to protect the "quality of all the waters of the state . . . for use and enjoyment by the people of the state." (Cal. Water Code § 13000.) To that end, the Porter-Cologne Act requires the regulation of all "activities and factors which may affect the quality of the waters of the state . . . to attain the highest water quality which is reasonable." (*Ibid.*)

Furthermore, California is a state authorized to administer NPDES permits and does so through the SWRCB and the Regional Boards. (Cal. Water Code §§ 13370; 13377.) Because the Regional Boards are responsible for monitoring and enforcing the State and federal plans, policies, and regulations that help protect and restore the water quality in California, a NPDES permit issued by a Regional Board must therefore advance the requirements and regulations promulgated under the Clean Water Act and Porter-Cologne Act.

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## General Comment Regarding The Renewal Of The City's NPDES Permit<sup>1</sup>

Conditions in the Delta are believed to have declined considerably since the City's prior permit was issued in 2002. As explained by the CALFED Bay Delta Program:

In the last few years [approximately 2002-2004], the abundance indices calculated by the Interagency Ecological Program (IEP) Fall Midwater Trawl survey (FMWT) and Summer Townet Survey (TNS) show marked declines in numerous pelagic fishes in the upper San Francisco Estuary (the Delta and Suisun Bay) (IEP 2005). The abundance indices for 2002-2004 include record lows for delta smelt and age-0 striped bass and near-record lows for longfin smelt and threadfin shad.

## (http://www.science.calwater.ca.gov/pod/pod\_index.html.)

Former Director of the California Department of Fish and Game, Ryan Broddrick, conveyed a similar point. He expressed to the U.S. House of Representatives, Committee on Natural Resources, Subcommittee on Water and Power:

Of particular concern to [the Department of Fish and Game] is the recent serious and unexpected decline (approximately 90%) in young Delta smelt produced this season. As alarming as the reduced numbers are, this decline is part of a more generally observed decline in other important fish and aquatic resources in the estuary. Anadromous fish (steelhead and salmon), sport fish (striped bass), other native fishes, and some important fish food organisms (invertebrates) of the Delta are in serious trouble.

(Statement Presented by Ryan Broddrick Director, California Department of Fish and Game To U.S. House of Representatives, Committee on Natural Resources

<sup>&</sup>lt;sup>1</sup> Although the Authority and Westlands present some of their concerns in concise format here, the Authority and Westlands will likely seek designated party status in advance of the hearing on these Tentative Discharge Requirements, currently scheduled for October 23 and 24, 2008.

In addition, the Authority and Westlands reserve the right to adopt comments made by any other designated or interested party and to elicit additional information at the hearing on this matter.

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Subcommittee on Water and Power Oversight Hearing on "Extinction is not a Sustainable Water Policy: The Bay Delta Crisis and the Implications for California Water Management", July 2, 2007, Vallejo City Council Chambers, Vallejo, California, a copy of which is attached hereto as Exhibit B.) This characterization caused Director Broddrick to conclude that the Delta is "broken." (Id.)

During the time of the perceived changes in the "health" of the Delta, and as noted above, the City held a NPDES permit for the RWCF, which the Central Valley Regional Board issued in 2002. The City has long acted in contempt of its responsibilities under that NPDES permit. Evidence demonstrates the City has, on an ongoing basis, violated discharge prohibitions, effluent limitations, receiving water limitations, and monitoring and reporting obligations under its prior NPDES permit. The Tentative Discharge Requirements reference some of those violations, albeit briefly. (See, e.g., Tentative Discharge Requirements, Attachment F, II.D.)

The changed circumstances in the Delta, the existence of the ongoing violations by the City, and the emergence of new studies and information on the effects of contaminants discharged in wastewater warrant two immediate actions by the Central Valley Regional Board. First, any NPDES permit issued by the Central Valley Regional Board to the City should have a shorter term that 5 year period, currently proposed, with provisions that allow for opening of the permit as new information develops. Second, the Central Valley Regional Board must base its decision to renew the City's NPDES permit upon contemporaneous scientific information and in recognition of the City's contemptuous actions. It cannot base the decision on outdated data or simply roll over the waste discharge requirements from the prior to the renewal NPDES permit.

The importance of a critical review of each effluent limitation proposed for the renewal NPDES permit is demonstrated by identified, high levels of mortality that have occurred for many years in the San Joaquin River, just downstream of the permitted location for the City's discharge. Most recently, in May 2007, a large number of salmon died just below the RWCF outfall. Although the Central Valley Regional Board determined that the mortality likely occurred at a time when the City was in compliance with the then existing discharge permit requirements, scientists concluded that the area was apparently a hostile place for juvenile salmon. (See 2007 Annual Technical Report On implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan, p. 55, a copy of which is attached hereto as Exhibit C.)

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# The Tentative Discharge Requirements Are Unlawfully Inconsistent With The Bay Delta Plan And Basin Plan

The Tentative Discharge Requirements are not consistent with the Bay Delta Plan, or the Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins ("Bay Delta Plan"). Most obvious, the Tentative Discharge Requirements impose an electrical conductivity (EC) limitation of 1,300 µmhos/cm (annual average), (Tentative Discharge Requirements, IV.A.1.j), while the Bay Delta Plan and the Basin Plan impose much more stringent requirements. The Bay Delta Plan and the Basin Plan establish 30-day running average salinity objectives of 700 µmhos/cm from April through August, and 1,000 µmhos/cm from September through March: (1) in the San Joaquin River at Brandt Bridge, (2) in Old River near Middle River, and (3) in Old River at Tracy Road Bridge. Thus, because of the differing periods of measurement, the EC limitation, at a minimum, exceeds the salinity objectives established in the Bay Delta Plan and the Basin Plan by approximately 30 to 85 percent.

To support EC limitations that are contrary to the Bay Delta Plan and the Basin Plan, the Tentative Discharge Requirements cite to Water Quality Order 2005-005. The Tentative Discharge Requirements suggest that, in Water Quality Order 2005-005, the SWRCB intended for "permit limitations to play a limited role with respect to achieving compliance with the EC water quality objectives." (Tentative Discharge Requirements, Attachment F, IV.C.3.y.v.) The Tentative Discharge Requirements also suggest that EC limitations consistent with the salinity objectives in the Bay Delta Plan and Basin Plans are infeasible. (Id.) The rationales fail for at least two reasons.

An interpretation that effluent limitations have a circumscribed role in achieving salinity water quality objectives is belied by the Bay Delta Plan. In the Bay Delta Plan, which the SWRCB adopted after it issued Water Quality Order 2005-005, the SWRCB made clear that the Central Valley Regional Board maintains a role in implementing salinity water quality objectives. The most explicit example is the SWRCB order to the Central Valley Regional Board, that requires it to "impose discharge controls on in-Delta discharges of salts by agricultural, domestic, and municipal dischargers", as a means of implementing salinity objectives in the San Joaquin River at Brandt Bridge, in Old River near Middle River, and in Old River at Tracy Road Bridge. (Bay Delta Plan at Ch. IV, B.1.) Contrary to that order, but as conceded in the Tentative Discharge Requirements, the proposed EC limitations "may cause or contribute to an exceedance of a water

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quality objective for salinity." (Tentative Discharge Requirements, Attachment F, IV.C.3.y.v.)

Furthermore, an argument that it is infeasible for the City to implement measure that will allow it to comply with the existing water quality objectives established in the Bay Delta Plan and Basin Plan is not well taken. Those objectives are not new. They date back to at least 1995, when the SWRCB issued is 1995 Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary. Ample time has passed for dischargers like the City to develop means of complying with the salinity objective set forth in the Bay Delta Plan and Basin Plan.

The Tentative Discharge Requirements do include a circumstance when the City must comply with the salinity objectives established in the Bay Delta Plan and the Basin Plan. However, the circumstance occurs only when the City fails to comply with a salinity reduction plan mandated in the Tentative Discharge Requirements. In other words, the Tentative Discharge Requirements impose on the City obligations that are consistent with the Bay Delta Plan and Basin Plan only as a penalty that may not ever be imposed. While the development and implementation of a plan may be appropriate in certain circumstances, this does not appear to be one of those circumstances. As discussed immediately above, the City has or should have been aware of the water quality objectives established for salinity for 13 or more years (the Bay Delta Plan superseded a prior plan adopted by the SWRCB in 1995, which included the same objectives for salinity), and the City has reasonable means to ensure its dischargers meet the objectives established in the Bay Delta Plan and Basin Plan.

# The Carryover Of Effluent Limitations From The City's Prior Permit Fails To Consider Changed Circumstances

As discussed above, the Central Valley Regional Board should not simply incorporate into the renewal NPDES permit the existing effluent limitations. The best available scientific data may not support a finding that past limitations are currently protective of beneficial uses. A change may also be warranted because of the City's ongoing violations of its prior NPDES permit.

Two examples of where the existing discharge requirements may not be appropriate are the effluent limitations for ammonia and dissolved oxygen. The effluent limitations for ammonia and dissolved oxygen in the Tentative Discharge Requirements

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are essentially carryover effluent limitations from the City's prior NPDES permit for the RWCF.<sup>2</sup> The rationales provided in the Tentative Discharge Requirements for the carryover of the ammonia and dissolved oxygen are presented in a summary fashion. The Tentative Discharge Requirements conclude that the ammonia limitation in the prior permit sufficiently protected the beneficial uses of the waters receiving the City's discharges based on an analysis of the maximum and average concentrations of ammonia in effluent and receiving water. (Tentative Discharge Requirements, Attachment F, IV.C.3.f.)

The Tentative Discharge Requirements for dissolved oxygen provide a similarly cursory explanation. They state:

The previous permit, Order No. R5-2002-0083, contained effluent limitations for dissolved oxygen of 6.0 mg/L from 1 September through 30 November and 5.0 mg/L throughout the remainder of the year.

The minimum DO concentration observed was 1.8 mg/L based on 1,498 samples collected between 1 May 2002 through 31 January 2007. The discharge demonstrates reasonable potential to exceed water quality objectives contained in the Basin Plan. Therefore, the daily minimum effluent limitations for dissolved oxygen contained in the previous permit, Order No. R5-2002-0083, are retained in this Order

(Tentative Discharge Requirements, Attachment F, IV.C.3.p.) The conclusions and analyses, however, do not consider important, emerging scientific research or the recognized, ongoing violations by the City of its prior NPDES permit.

<sup>&</sup>lt;sup>2</sup> Actually, the Tentative Discharge Requirements allows an additional one pound of ammonia discharge as both an average monthly and maximum daily figure as compared with the City's prior permit, which could be construed as an unauthorized relaxation of the permit's requirements.

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The SWRCB and the Central Valley Board have identified the emergence of potentially important, new science related to toxics, including ammonia, in the Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary ("Bay Delta Strategic Workplan"), a copy of which is attached hereto as Exhibit D. For example, in that Workplan, the SWRCB and the Central Valley Regional Board wrote:

Studies suggest that delta smelt may be particularly sensitive to ammonia and that ammonia may limit primary productivity in the Delta. Definitive, controlled laboratory experiments must be conducted to determine the importance of these potential impacts.

(*Id.* at 53.) Also, the Central Valley Regional Board's concern with ammonia in the Delta has been the subject of two recent, summary papers, copies of which are attached hereto as Exhibit E.<sup>3</sup>

At present, the Tentative Discharge Requirements do not indicate what – if any – contemporaneous scientific materials the Central Valley Regional Board consulted and considered to arrive at its decision regarding the ammonia limitation (or any other effluent limitation for that fact). The lack of explanation or change to the Tentative Discharge Requirements from what existed in the prior NPDES permit held by the City strongly suggest that no new information was relied upon or considered. It also appears that the Tentative Discharge Requirements fail to account for the ongoing violations by the City. For these reasons, and contrary to the Tentative Discharge Requirements, the evidence reflects a need for the Central Valley Regional Board to conduct an independent analysis which will support a finding that the Tentative Discharge Requirements and effluent limitations provided therein will protect the beneficial uses of the receiving waters.

## **Need For More Rigorous Monitoring**

The Tentative Discharge Requirements lack the level of rigor required for monitoring. The SWRCB and the Central Valley Regional Board recognized in the Bay

<sup>&</sup>lt;sup>3</sup> The two papers were found on the Central Valley Regional Board's website at:

waterboards.ca.gov/centralvalley/water issues/delta water quality/ammonia issues/ammonia issues 11jun08.pdf, and waterboards.ca.gov/centralvalley/water issues/delta water quality/ammonia issues/delta smelt update 30jul08.pdf

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Delta Strategic Workplan the importance of increased monitoring for contaminants. The Bay Delta Strategic Workplan provides:

The pelagic organism decline in the Delta and subsequent increased focus on contaminants as a potential cause highlight the need for regularly compiling, assessing, and reporting data that is currently being collected and the need to better coordinate monitoring efforts.

(Bay Delta Strategic Workplan, p. 59.) The renewal of the City's NPDES permit provides an opportunity to effectuate better monitoring of contaminants.

More specifically, the SWRCB and Central Valley Regional Board noted that there "are a suite of contaminants and source categories that pose a concern for some Delta beneficial uses and there is also concern for an emerging list of new contaminant categories (pharmaceuticals and endocrine disrupters)." (Bay Delta Strategic Workplan, p. 25.) Recent investigations claim to have discovered detectable levels of pharmaceuticals in drinking water supplies across the country. ("Prescription Drugs Found in Drinking Water Across U.S." Associated Press, March 10, 2008; "AP Enterprise: Drugs Affect More Drinking Water," Associated Press, September 11, 2008; "AP Enterprise: Report Prompts More Testing," Associated Press, September 11, 2008.) The investigations assert medication not absorbed by its taker "passes through the [body] and is flushed down the toilet," and that even though the wastewater is treated "most treatments do not remove all drug residue." Thus, according to the investigations, prescription drugs can enter water supplies through municipal wastewater discharges.

It is presently unclear whether NPDES permits, like the one the City seeks, should include discharge requirements that specifically address pharmaceuticals. However, emerging science indicates that "persistent exposure to random combinations of low levels of pharmaceuticals . . . [indicate] alarming effects on human cells and wildlife." ("Prescription Drugs Found in Drinking Water Across U.S." Associated Press, March 10, 2008.) Therefore, at a minimum, the City should be required to monitor the pharmaceutical constituents in its waste discharges.

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#### Conclusion

For the reasons set forth above, the Authority and Westlands respectively request that the Central Valley Regional Board not adopt the Tentative Discharge Requirements. The Authority and Westlands remain concerned that the Tentative Discharge Requirements are not protective of beneficial uses. They do not appear consistent with the Bay Delta Plan and the Basin Plan, and they do not appear to reflect important, emerging science.

Further, the changed circumstances in the Delta, the existence of the ongoing violations by the City, and the emergence of new studies and information on the effects of contaminants in wastewater warrant a renewal NPDES permit that has a term shorter then 5 years, as currently proposed, with provisions that allow for opening of the permit as new information develops, and more thorough analyses of what effluent limitations will protect beneficial uses, analyses based on contemporaneous scientific information.

Finally, the NPDES permit ultimately issued by the Central Valley Regional Board must include increased monitoring by the City.

Thank you very much for your consideration of these comments.

Very truly yours,

DIEPENBROCK HARRISON A Professional Corporation

Jon D. Rubin

Attorneys for San Luis & Delta-Mendota Water Authority and Westlands Water District

Daniel Nelson, SLDMWA Thomas Birmingham, WWD

CC:



A PROFESSIONAL CORPORATION

September 22, 2008

JOHN Y. "JACX" DIEPENBROCK
KAREN L. DIEPENBROCK
KEITH W. M. BERIDE
BRADLEY J. ELKIN
EILEEN M. DIEPENBROCK
MARK D. HARRISON
GENE K. CHEEVER
LEWRENCE B. GARCIA
ANDREA A. MATARAZZO
JOEL PATRICK ERB
JOH D. RUBIN
JEHNIFER L. DAUER
JEFFREY K. DORSO

LEONGR Y, DICDICAN JULIE Y, REISER CHRIS A. MCCANDLESS DAVID P. TEMBLADOR DAM M. SILVERBOARD LANONT T. XING, JR. DANIEL J. WHITNEY DAVID A. DIEPENBROCK JONATHAN R. MARZ VALERIE R. KINCAID ANTHONY J. CORTEZ

IEFFREY L ANDERSON

SEAN K. HUNGERFORD

R. JAMES DIEPENBROCK (1929 – 2002)

Ms. Pamela C. Creedon, Executive Officer
Mr. Kenneth D. Landau, Assistant Executive Officer
Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Dr., Suite #200
Rancho Cordova, CA 95670

Re: Renewal of Waste Discharge Requirements (NPDES NO. CA0079138) and Time Schedule Order for City of Stockton Regional Wastewater Treatment Control Facility, San Joaquin County

Dear Ms. Creedon and Mr. Landau:

Through this letter, the San Luis & Delta-Mendota Water Authority ("Authority"), on behalf of its member agencies, and Westlands Water District ("Westlands") provide written comments on the tentative waste discharge requirements (National Pollutant Discharge Elimination System ("NPDES") permit No. CA0079138) applicable to the City of Stockton's ("City") Regional Wastewater Treatment Control Facility ("RWCF") ("Tentative Discharge Requirements").

The Authority, formed in 1992 as a joint powers authority, consists of 31 public agencies, each of which contracts with the United States Department of the Interior, Bureau of Reclamation ("Reclamation"), for water from the Central Valley Project ("CVP"). The Authority's members hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP water annually. Reclamation conveys CVP water delivered to the Authority's members through the Sacramento-San Joaquin River Delta ("Delta"). Of the amount of water under contract, the Authority's members put to beneficial use, on average, approximately 2 million acre-feet of water on about 1.2 million acres of agricultural lands within the western San Joaquin Valley and parts of San Benito and Santa Clara Counties, California; 200,000 acre-feet for municipal and industrial uses, including those within the Silicon Valley; and approximately 300,000

400 CAPITOL MALL SUITE 1800 SACRAMENTO, CA 95814

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acre-feet for environmental purposes, including for waterfowl and wildlife habitat management in the San Joaquin Valley, California.

Westlands, a member of the Authority, is a California water district formed in 1952. Westlands uses CVP water for irrigation of approximately 500,000 acres on the west side of the San Joaquin Valley in Fresno and Kings Counties, as well as for municipal and industrial purposes within those Counties. Westlands' farmers produce more than 60 high quality commercial food and fiber crops sold for the fresh, dry, canned, and frozen food markets, both domestic and export. More than 50,000 people live and work in the communities that are dependent on Westlands' agricultural economy.

The Authority and Westlands appreciate the challenge the California Regional Water Quality Control Boards ("Regional Boards") face in balancing the competing interests potentially affected by renewal of the City's NPDES permit. In an effort to help the Central Valley Regional Board make a properly balanced and reasoned decision, the Authority and Westlands submit the following comments.

## Interest In Tentative Discharge Requirements

The RWCF is part of the City's wastewater collection and treatment system. That system is comprised of over 38,000 sewer connections and 900 miles of sanitary lines. (City of Stockton, Municipal Utilities Department, http://www.stocktongov.com/MUD/General/waste\_water/waste\_main.cfm, available as of September 18, 2008.) The City's RWCF provides sewerage service to the City, the Port of Stockton, and surrounding urbanized areas of San Joaquin County. As currently permitted, the City's treated municipal wastewater should be discharged from a single outfall into the Delta.

The Authority and Westlands have an acute interest in discharges to the Delta because of the impact they can have on the water supply of the Authority's member agencies, including Westlands. Two examples highlight this point. First, the State Water Resources Control Board ("SWRCB") assigned to Reclamation significant responsibility for water quality objectives established in the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary ("Bay Delta Plan"), a copy of which is attached hereto as Exhibit A. As a result, discharges into the Delta that fail to adequately protect beneficial uses of Delta water could require Reclamation to increase releases from CVP reservoirs and/or reduce pumping at in-Delta CVP facilities,